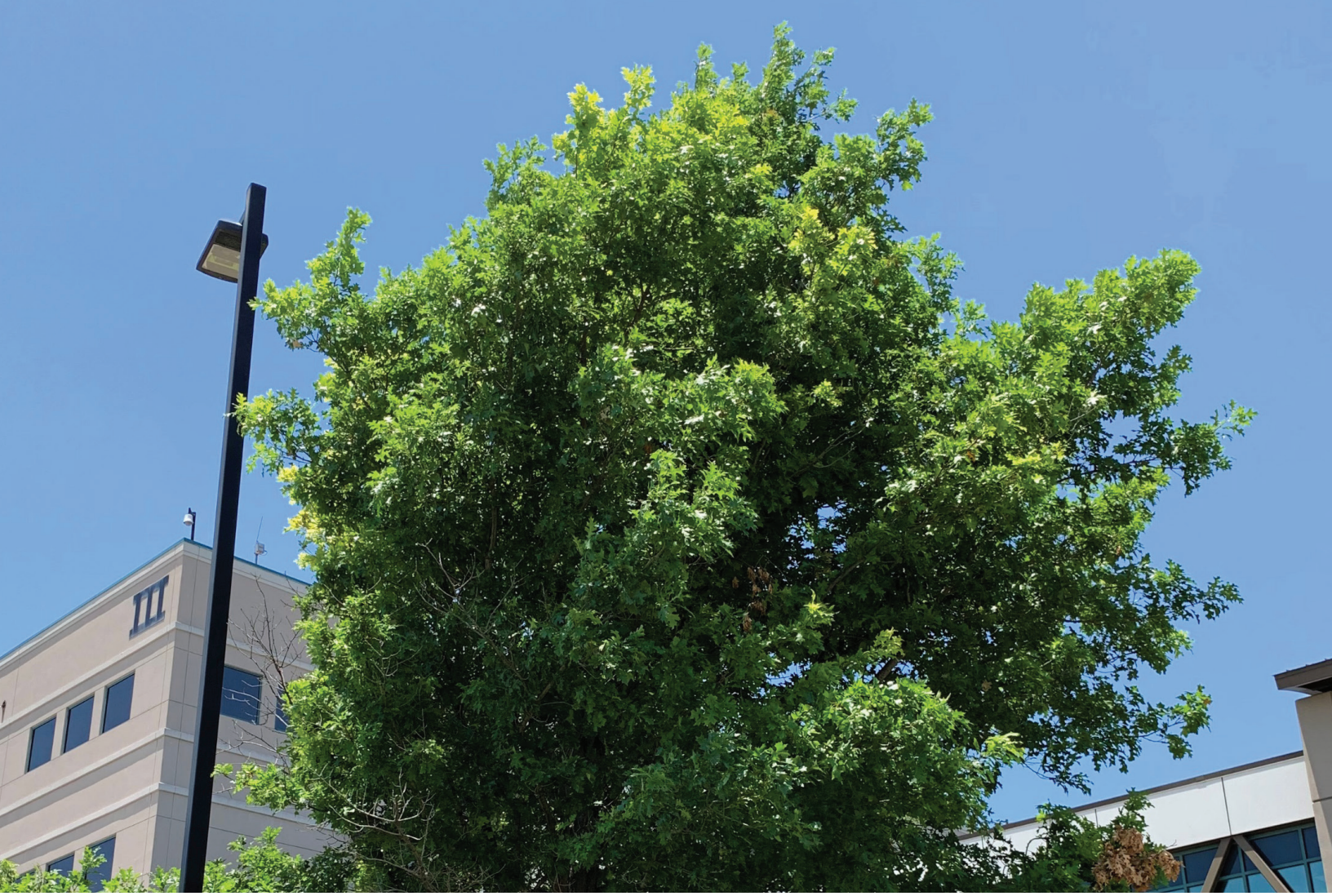
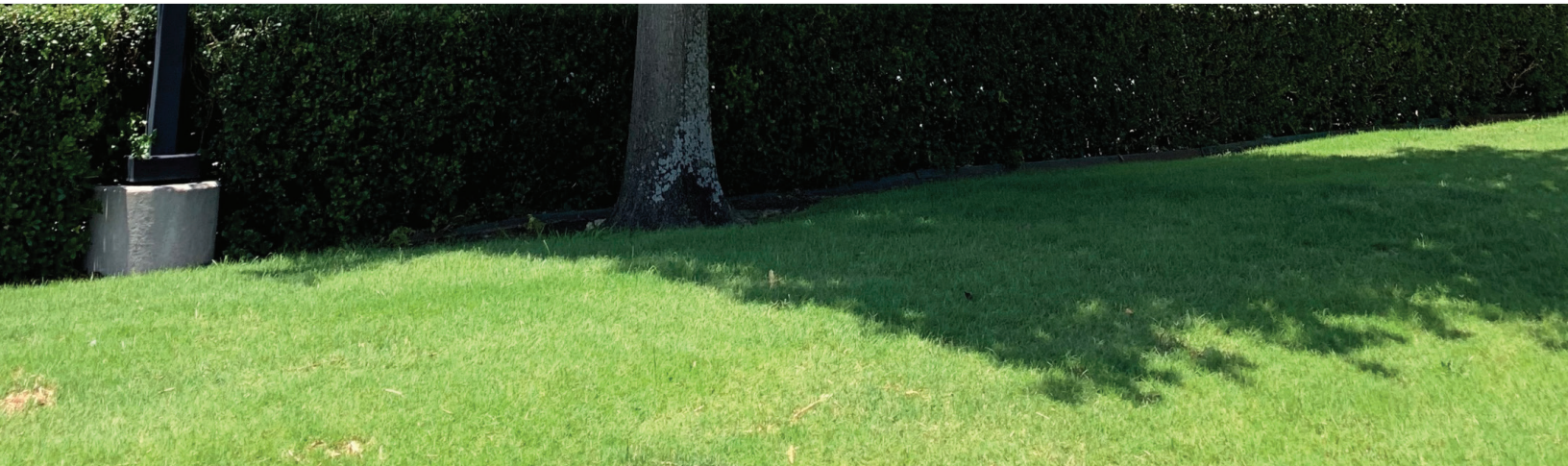


Mn-jet Fe™ Shortstop® 2SC FIELD TRIALS

ARBORJET | Ecologel®
PARTNERS IN PLANT CARE



TREATMENT OF CHLOROSIS USING MN-JET FE™ & SHORTSTOP® 2SC

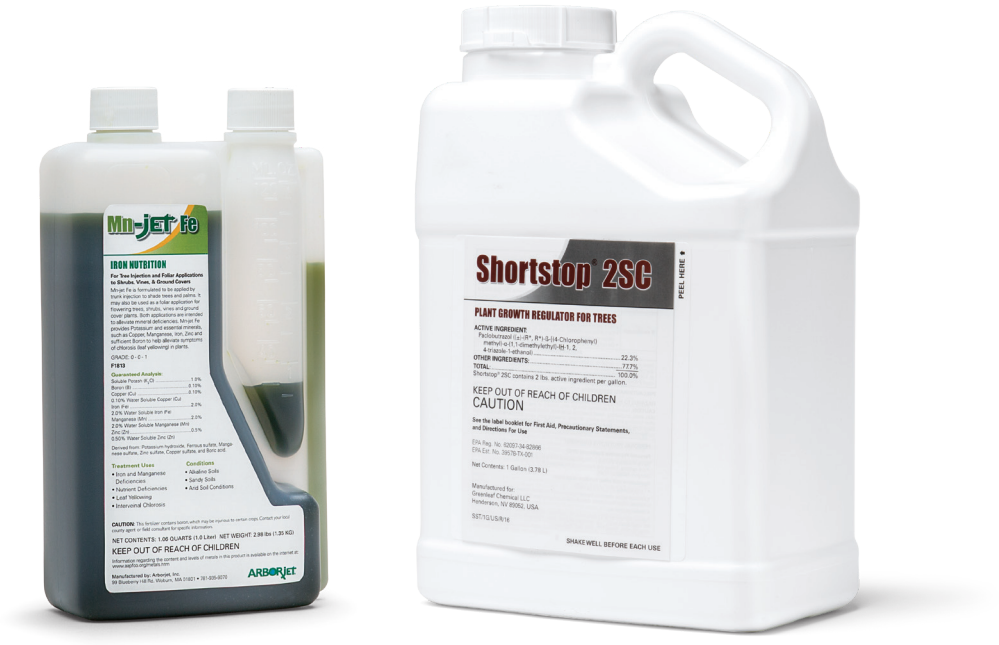
Chlorosis in trees has several causes. Typically, these chlorotic trees lack chlorophyll, due to a micro-nutrient deficiency which disrupts normal tree physiology. Micronutrients are the elements needed in small quantities, but without which trees can't grow properly.

We have found that a combination of our soil applied growth regulator, Shortstop 2SC, and our trunk-injected micronutrient formulation, Mn-jet Fe, will work together to improve nutrient availability and several key tree functions.

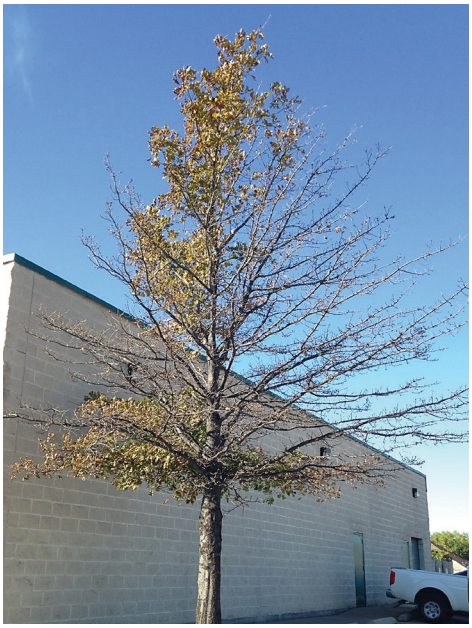
In addition to its growth regulating properties, Shortstop 2SC enhances chlorophyll production and will promote a healthier tree through several secondary effects. While it redirects growth away from the shoots, it concurrently enhances fine root hair development. These new fine roots more effectively capture available Iron, Manganese, and other micronutrients in the soil, thus aiding in chlorophyll production. These new root-hairs increase protection against drought stress, while Shortstop 2SC also limits water loss through leaf stomata.

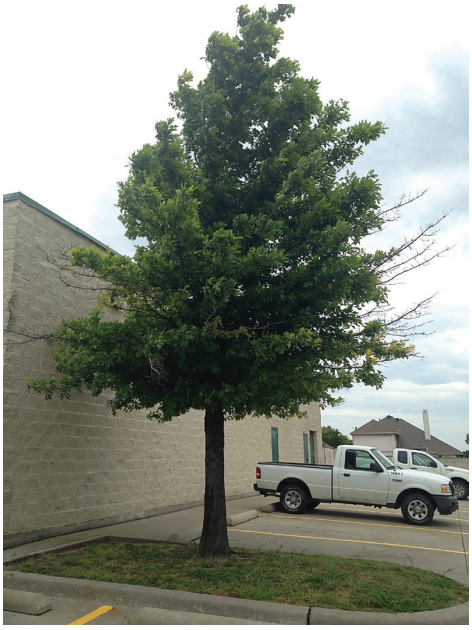
Mn-jet Fe is a balanced source of several micro-nutrients, which directly alleviate chlorosis by supplying them through trunk injection. Using Mn-jet Fe will increase chlorophyll production for up to three growing seasons, will improve tree vitality, and enhance the natural green color, thus restoring the aesthetic qualities of shade trees.

Using a combination of Mn-jet Fe and Shortstop 2SC will provide you with a successful solution, as you respond to soils which are not favorable for optimal tree growth.



Mn-jet Fe Fall Application 15mL/inch (Neat)

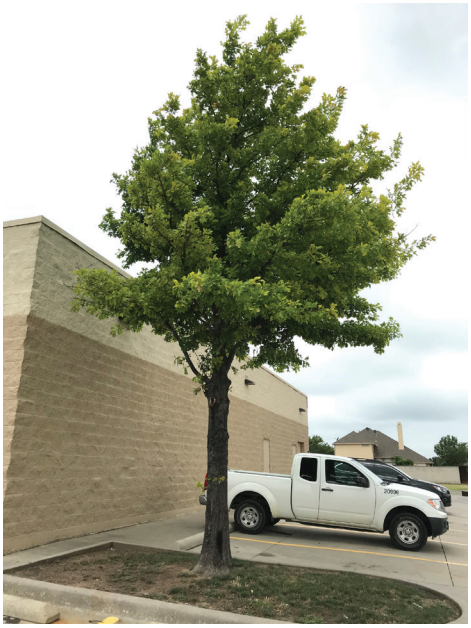


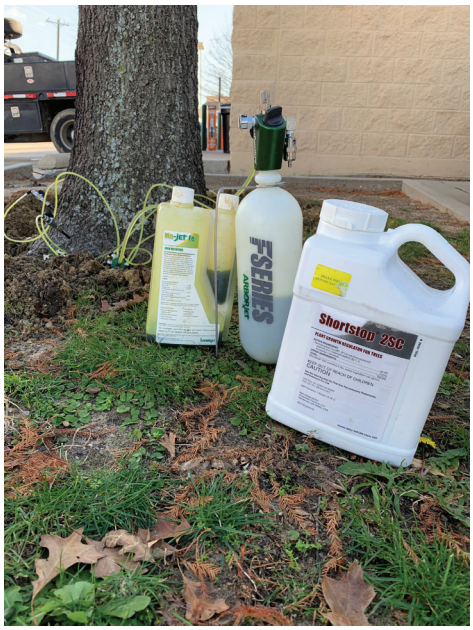


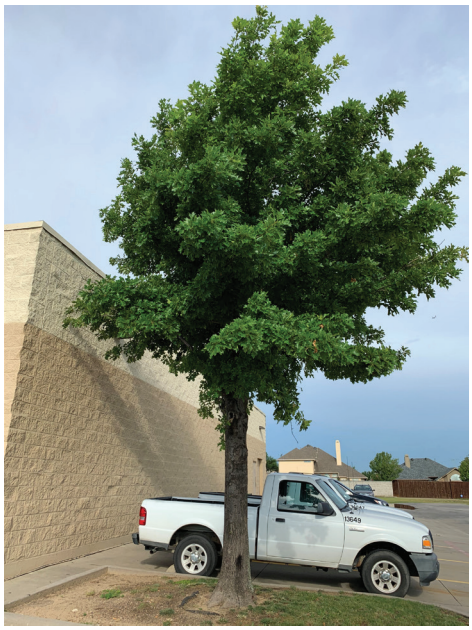
October 2015 May 2016

One application made in October 2015.
Tree is growing in an O'Reilly's parking lot in Dallas, no irrigation.

Mn-jet Fe + Shortstop 2SC for Best Results



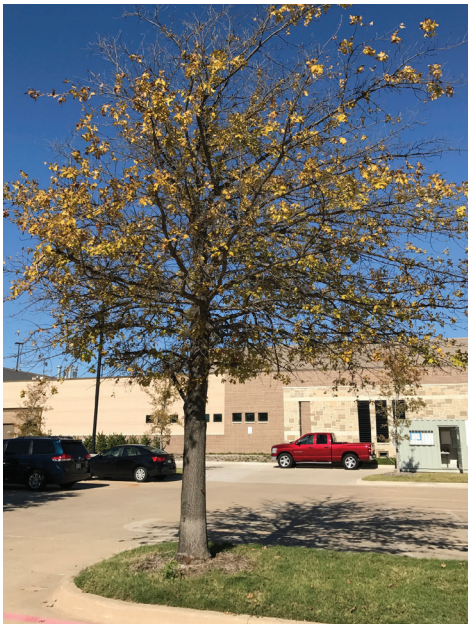




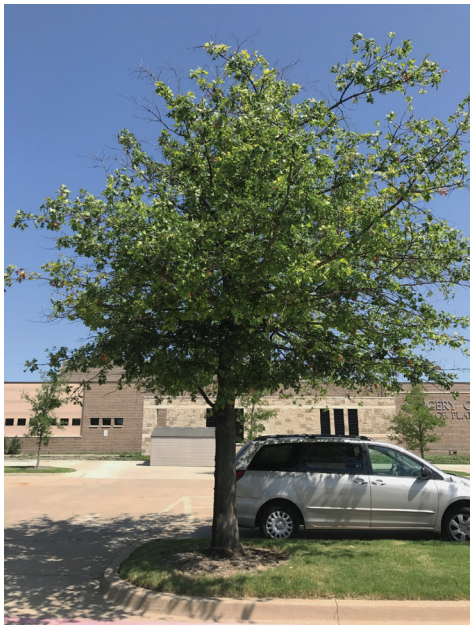
June 2018 Retreated December 2018 June 2019

3 years green up from first application.
Tree was much improved in 2016 through 2018 from just one application.
Treated again in Fall of 2018 with 15mL of Mn-jet Fe and Shortstop 2SC.

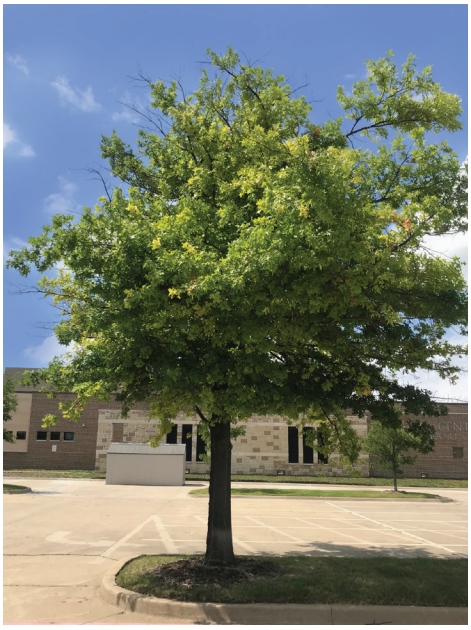
Mn-jet Fe: 11" DBH (high rate 15mL/ inch Neat)



Nov 2016 - First Treatment



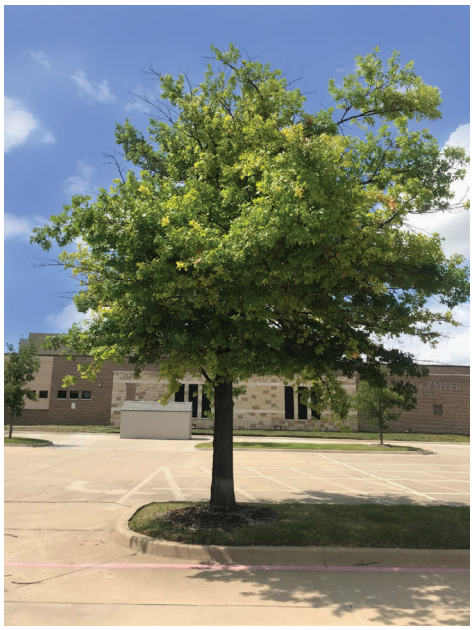
July 2017



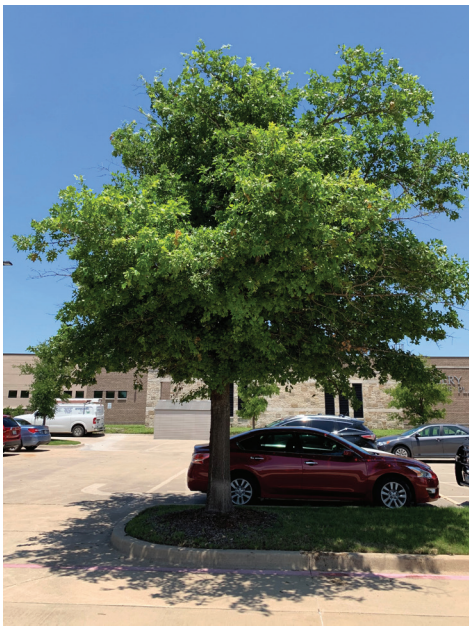
June 2018

2 years of green up

Mn-jet Fe and Shortstop 2SC applied December 2018

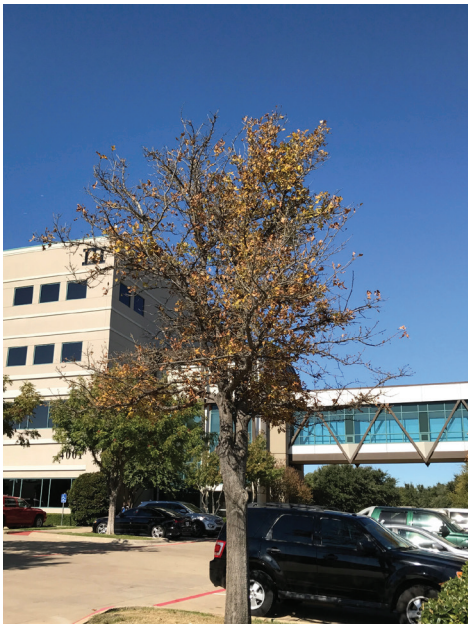


June 2018

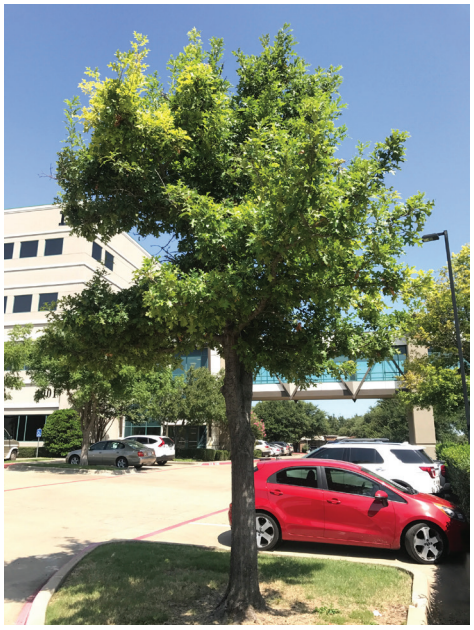


June 2019

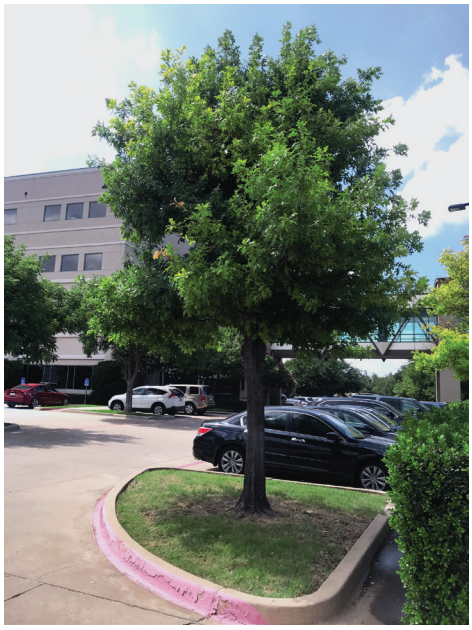
Mn-jet Fe: 9" DBH (15mL/inch)



Nov 2016

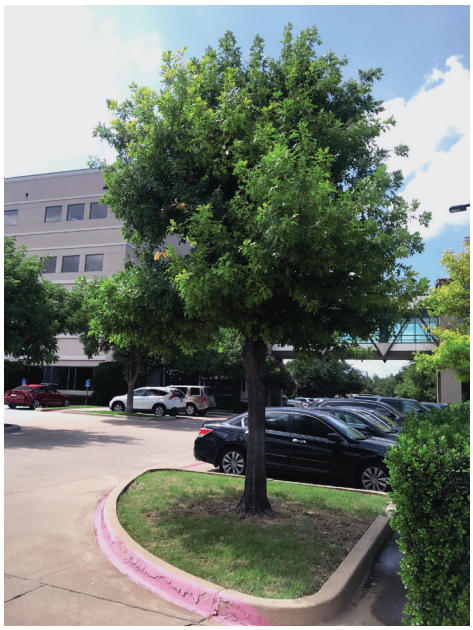


July 2017

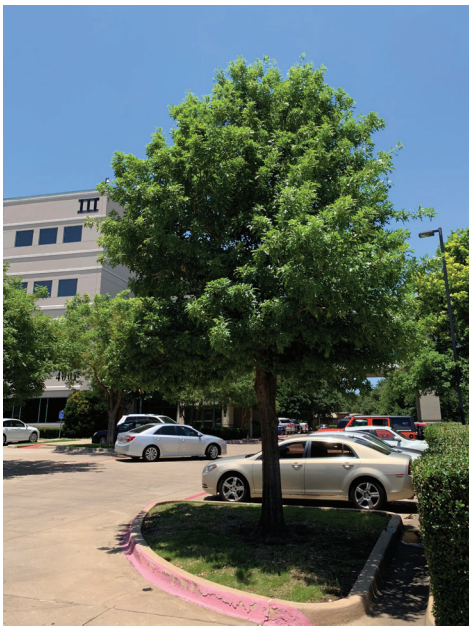


June 2018

Mn-jet Fe and Shortstop 2SC applied December 2018



June 2018

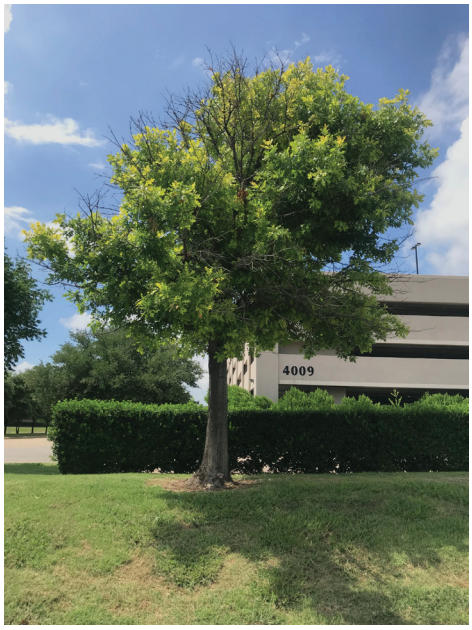


June 2019

Summer Application Mn-jet Fe: 11" DBH (5mL/inch)

May 2017

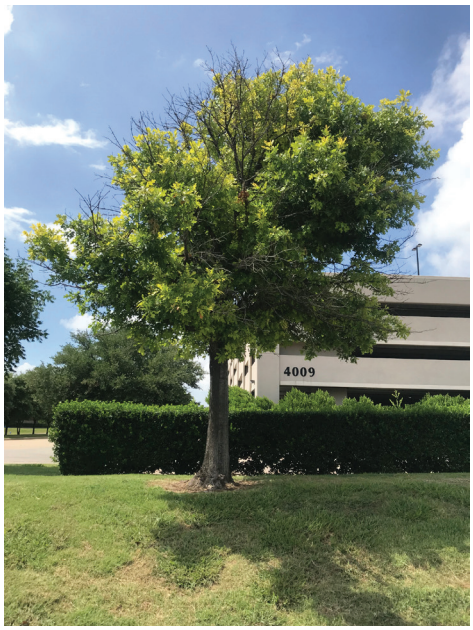
July 2017



June 2018

This tree was near death. Treated just to see what would happen.
2 years of significant improvement from the low rate!

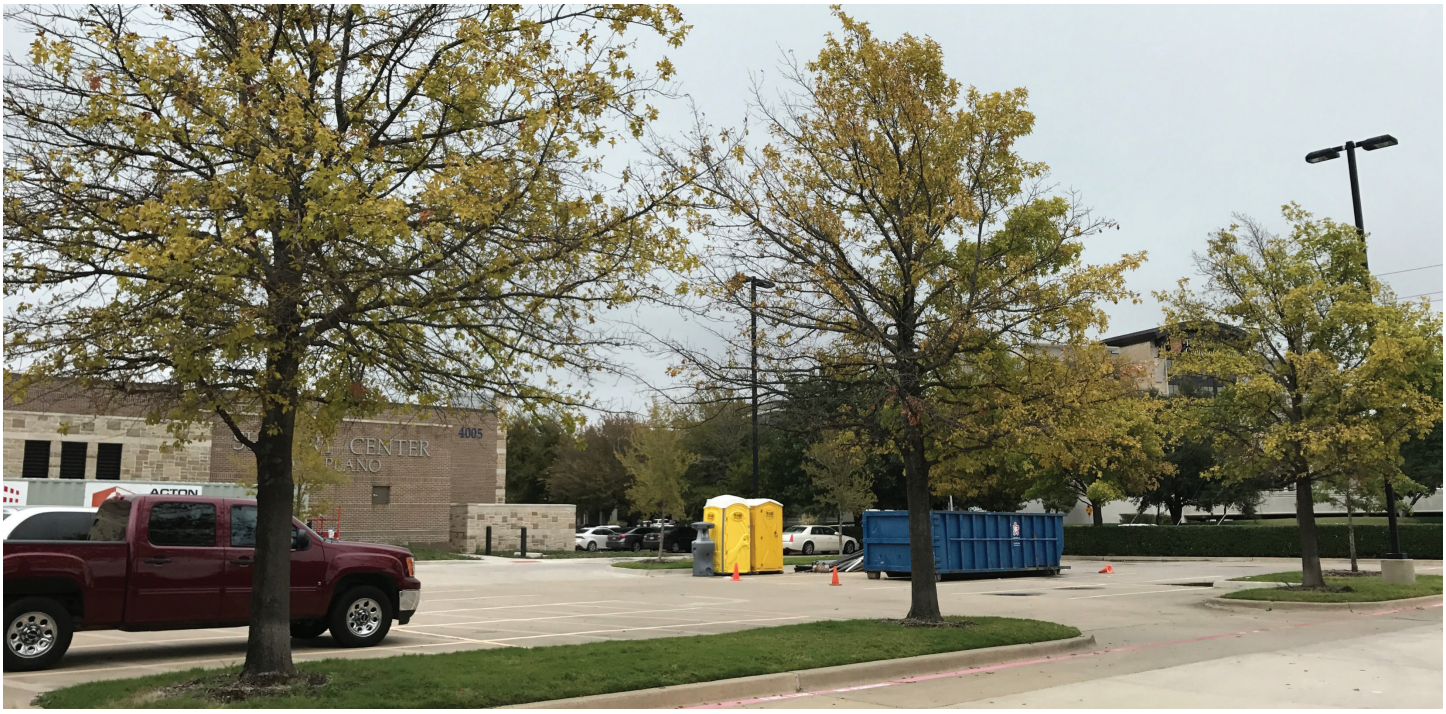
2nd Application, 15mL/inch Mn-jet Fe, Dec. 2018



June 2018

June 2019

Mn-jet Fe Applications: 15mL/inch



November 2016

June 2019

Mn-jet Fe in Fall 2016 & 2018

Untreated