



Mark Diciaccio – Operations Supervisor  
Don Johnson – Wastewater Foreman

Lake Cities Municipal Utility Authority  
P.O. Box 2017  
Lake Dallas, Texas 75065

April 30, 2013

Re: Project Documentation for Grease Control Using Micro-Solve® Solubilizer-Demulsifier/Bacteria Accelerator

Gentlemen,

This report outlines some of the progress of the Micro-Solve® pilot being applied at Lift Station #6, and the added downstream benefits at Lift Stations #7 / Lift Station #8.

**Don and Brad both have mentioned that out of dozens of pilots with similar products, Micro-Solve® is the only product that has thus far managed the grease issues as advertised.** Listed below the issues section on each page, **in bold for easy reference**, is the progress that has been made up to this point.



### Lift Station #6:

April 30, 2013

The above photos were taken of the wet well at Lift Station #6 in Lake Dallas, Texas on February 2nd (left), March 8<sup>th</sup> (Center), and April 30th (right).

Issues: This wet well is located at the most outer lying lift station on this collection line. This wet well is said to have the grease “fished” out of it on a weekly basis. The collection line that was video taped is confirmed to be the incoming line to this area, so we are considering alternating applications from the nearest upstream manhole to the wet well every other week. Mr. Don Johnson confirmed that the large grease chunks were from the incoming line that they had jetted out not too long ago.

The above photos were taken over about a 2 ½ month period of time illustrating the progression of the pilot thus far. We did the final agitation for the pilot and the grease that was in the area was breaking apart in the water, on the walls and floats with just standard water pressure. Notice that the large chunks of grease in the area have dissipated and otherwise been consumed by the facultative bacteria. The grease in the area continues to decrease from week to week and no maintenance has been performed on the station in 10 weeks.

Dosage: 3 gallons per week alternating between the upstream manhole and the wet well at LS #6.



### Lift Station #7:

April 30, 2013

The above photos were taken of the wet well at Lift Station #7 in Lake Dallas, Texas on February 2nd (left) and April 16th (Center), and April 30th (right).

Issues: This wet well was previously being cleaned out on a weekly basis.

There has been a significant reduction in solids since the start of the pilot and even from the previous week. Notice almost all of the smaller pieces of grease from the previous weeks have been consumed by the facultative bacteria and the larger pieces of grease that were in the well have started to spread out and dissipate with very little density to the chunks. The grease that remains is very soft/soluble and not causing any problems in the area.

Dosage: Micro-Solve® is not being directly applied at this location.



### Lift Station #8:

April 30, 2013

The above photos were taken of the wet well at Lift Station #8 in Lake Dallas, Texas on February 2nd (left) and April 30th (right).

This wet well was previously being cleaned out on a weekly basis. There was previously an odor concern and some calcified grease that was collected around the rim of the well and the pipes leading up through the surface.

This station continues to be maintained at the maintenance dosage applied 2 lift stations upstream. The grease that has entered the station is very small and the larger pieces continue to break down and are consumed by the facultative bacteria. The grease that is in the area is not solidifying or causing any problems and no maintenance has been performed at this location in the past 2 ½ months.

**Dosage:** Micro-Solve® is not being directly applied at this location (Application 2 lift station up stream).



**Benefits:**

- 1) No vacuuming or cleaning as related to grease.
- 2) Reduction of health hazards for workers.
- 3) Reduction wear and tear on pumps and mechanical parts.
- 4) No jetting of lines or build up as related to grease.
- 5) Reduction of odor and corrosion.
- 6) Decrease of B.O.D. and T.S.S. levels

We are just over 10 weeks into the pilot and still the grease is not solidifying or causing any issues in not only LS#6, but also the two downstream lift stations.

Sincerely,

Jeremy Love

**Chuck Jones**

P.O. Box 40843, Austin, TX 78704

Phone: 512.660.2883

Fax: 512.672.6108