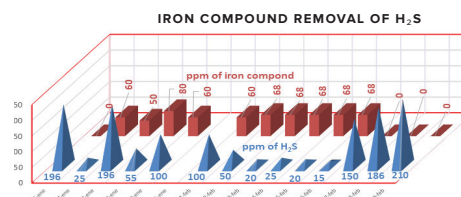
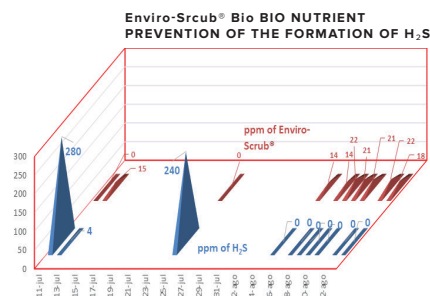
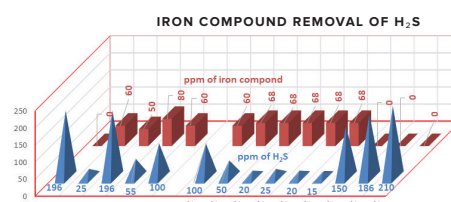


**CASE STUDY 601**

# THE USE OF Enviro-Scrub® BIO NUTRIENT TO PREVENT FORMATION OF H<sub>2</sub>S

A lift station in South Central Texas was using a ferric iron compound to mitigate H<sub>2</sub>S. The H<sub>2</sub>S was typically 210 PPM but lower levels were also registered. High levels of H<sub>2</sub>S present a danger to people – either employees or others exposed to the H<sub>2</sub>S in air. Graph 1 shows the results obtained utilizing the iron compound.

- At a dosage rate of 68 ppm of iron compound, the H<sub>2</sub>S was reduced to 20 parts per million at best. However, on most days the H<sub>2</sub>S level was significantly higher than 20 ppm after treating with the iron compound.
- Q2 Technologies Enviro-Scrub® Bio nutrient was used instead of the iron compound to eliminate the presence of H<sub>2</sub>S. Graph 2 shows the results obtained.
- The use of Enviro-Scrub® Bio nutrient began when the H<sub>2</sub>S levels were 280 ppm.
- Enviro-Scrub® Bio nutrient immediately reduced the H<sub>2</sub>S to 4 ppm. Enviro-Scrub® Bio nutrient was injected continuously at dosage levels of between 14 to 20 ppm, and the H<sub>2</sub>S level went down to zero. The same zero H<sub>2</sub>S result was obtained consistently during the eight days that the trial lasted.
- Enviro-Scrub® Bio nutrient does not scavenge the H<sub>2</sub>S, like the iron compound. Enviro-Scrub® Bio nutrient stops the formation of H<sub>2</sub>S from occurring by changing how bacteria metabolize organic waste. A comparison between the effect of preventing development of H<sub>2</sub>S with Enviro-Scrub® Bio vs. removal of H<sub>2</sub>S with the iron compound is shown on Graph 2 and Graph 3.


**GRAPH 1**

**GRAPH 2**

**GRAPH 3**
**TAKE-AWAYS:**

- H<sub>2</sub>S was completely eliminated.
- H<sub>2</sub>S spikes were no longer seen.