

NATURAL GAS PIPELINE TREATMENT RECOMMENDATION

INITIAL DISCOVERY

- 1. Focus on identifying how much liquid is moving through each transmission/trunk line and the CO2 and H2S content of the gas.
- 2. NanoSLICK acts as an H2S scavenger, so if there is H2S present in the gas, you will want to bump up the PPM and will maintain a higher PPM over the long haul. If H2S is really bad, we have other products that are more appropriate for large volume scavenging.



TREATMENT

- 1. Start with a minimum of 1 gallon of 15% NanoSLICK per day per injection point and increase volume on any lines where that volume doesn't provide 50ppm by volume of the fluid travelling through the line.
- 2. Most of these lines will have coupons that can be checked for corrosion. If corrosion has been arrested, you can start backing off on the NanoSLICK concentration as long as there is no impact on the coupons.
- 3. A Current major user of NanoSLICK targeted 27ppm as a continuous injection rate based on testing in their research center and field testing. They ended backing off to 15ppm over time.
- 4. The reason that you can back off on the concentration over time is that once a section of pipe is coated, the NanoSLICK will move past that section and try to react with untreated pipe. So over time, as more and more of the system is pickled, the dosage requirement drops. It's only through abrasion or acidizing that the coating will be removed.

PERFORMANCE

- The silicate particle in the NanoSLICK is what creates corrosion protection. It plates out on the pipe/valves and creates what is called a mono-layer.
- 2. That mono-layer acts as an oxygen barrier. If the oxygen can't get to the metal, the metal won't corrode.
- 3. The mono-layer does not build up in thickness over time. It will also self-heal if damaged. I.e. you pig a line and the brushes scrape through the layer.





FOR A CUSTOMIZED TREATMENT SOLUTION, CONTACT:

David P. Shrout-Managing Partner

Houston 281-413-2615 Topic DFW 214-960-9979 Toll Free 800-925-4430
648 S Houston Ave. Humble, TX 77338

david.shrout@tribo-chem.com

www. tribo-chem.com