

## MC M-8120 Cleans Up Iron Sulfide Deposition Gas Production Increases 50 MCF/day and LOE Reduced

### BACKGROUND

While H<sub>2</sub>S wasn't a problem the related iron sulfide issues were showing up in well bores throughout the field. The wells averaged 1,500 BWPD, and 300 MCF/day. The producer decided to attempt to clean up the well bore in hopes of increasing hydrocarbon production throughout the field.

### ISSUES

After years of neglect, this once sweet gas field now produced sour gas.  
H<sub>2</sub>S is not considered a problem as there are sour gas lines in the area to carry it to the sales point.

### ANALYSIS

The wells in the field are a mixture of oil and gas producers. The gas wells are equipped with a submersible pump which will not allow acid treatments on the back side of the tubing. These wells were treated on a regular basis with 15% HCL down the tubing, leaving the backside un-treated. The tubing was pulled for inspection and Multi-Chem's local representative found the backside of the tubing was coated with a thick layer of iron sulfide (¾ inch in places).

### RESOLUTION

MC M-8280 was used to treat a well. 110 gallons of M-8280 was pumped and circulated up the tubing and down the backside for 6 hours. After circulation, the well was produced for 38 days before the submersible pump shorted out. The well was pulled and the tubing inspection showed the M-8280 treatment was extremely effective. More than 75% of the Iron Sulfide deposition had been removed. The operator began a bi-monthly treating schedule for 4 wells and is planning to use M-8280 on 12 more wells.

### DELIVERED VALUE

Multi-Chem lowered the corrosion rate in the wells and removed the iron sulfide deposition from the tubing.  
Monthly Cost / well: \$4,235

Investment Return:  
Production increase: 50MCF/day (\$10,500 / month)  
Lower H<sub>2</sub>S in gas plant and pipeline, reduced tubing costs for all four wells and increased production on all wells treated with M-8280.  
Water production is up 250 bbl per day on average. Tubing replacement Costs and LOE is down significantly on these four wells.

Multi-Chem warrants to purchaser, but no third parties or others, the specifications for the product shall fall within a generally recognized range for typical physical properties established by Multi-Chem when the product departs Multi-Chem's point of origin and that any services shall only be performed in accordance with applicable written work documents. Purchaser agrees that Multi-Chem will give purchaser the benefit of Multi-Chem's professional judgment in making interpretations of data, but does not guarantee the accuracy or correctness of such interpretations. Multi-Chem's recommendations contained herein are advisory only and without representations as to the results. NO ORAL OR WRITTEN INFORMATION OR ADVICE GIVEN BY MULTI-CHEM SHALL CREATE A WARRANTY OR IN ANY WAY INCREASE THE SCOPE OF THE WARRANTY CONTAINED HEREIN. EXCEPT AS OTHERWISE SET FORTH HEREIN, THE PRODUCTS AND SERVICES ARE "AS IS" AND MULTI-CHEM MAKES NO OTHER WARRANTY OR GUARANTEE OF ANY KIND WHATSOEVER, EXPRESS OR IMPLIED, INCLUDING NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. PURCHASER AGREES THAT MULTI-CHEM SHALL NOT BE LIABLE FOR ANY INDIRECT, SPECIAL, PUNITIVE, EXEMPLARY OR CONSEQUENTIAL DAMAGES OR LOSSES FROM ANY CAUSE WHATSOEVER INCLUDING BUT NOT LIMITED TO NEGLIGENCE OR GROSS NEGLIGENCE.

#### Global Technology Center

World Houston International Business Center  
15865 International Plaza Drive, Suite 200  
Houston, Texas 77032 USA

(800) 805 9178  
(325) 223 6200  
(325) 942 7500 FAX

[www.multichem.com](http://www.multichem.com)