

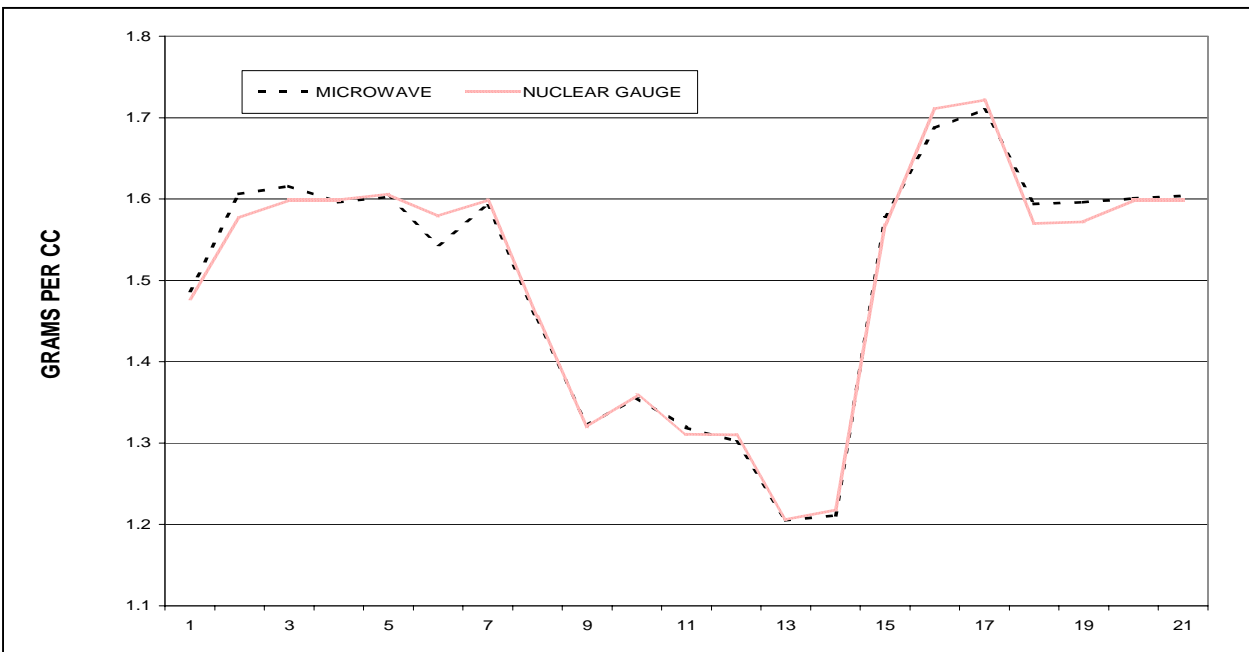
HK INSTRUMENT SYSTEMS

PITTSBURGH, PA

INDUSTRY: POWER PRODUCTION

- APPLICATION:** TO MONITOR AND CONTROL THE DENSITY OF A SYNTHETIC GYPSUM SLURRY.
- INSTALLATION:** THE HK-1 MICROWAVE INSTRUMENT SYSTEM WAS INSTALLED ON A 10 INCH PIPE. THE MICROWAVE SENSOR PINS ARE INSTALLED DIRECTLY ON A VERTICAL PIPE USING THREADED HALF-COUPPLINGS.
- TESTING:** SAMPLES WERE COLLECTED FROM THE PIPELINE AND ANALYZED IN THE LAB USING AN OVEN. READINGS FROM THE HK-1 MICROWAVE SYSTEM WERE RECORDED EACH TIME A SAMPLE WAS COLLECTED.
- RESULTS:** CORRELATION BETWEEN LAB SAMPLES AND MICROWAVE READINGS IS EXCELLENT.

LAB OVEN VS MICROWAVE SYNTHETIC GYPSUM SOLIDS IN WATER



SAMPLE NUMBER (TIME >>>)

- CONCLUSIONS:** THE HK-1 MICROWAVE INSTRUMENT SYSTEM IS AN EXCELLENT TOOL THAT CAN BE USED TO MONITOR AND CONTROL THE DENSITY OF A SYNTHETIC GYPSUM AND WATER SLURRY.