



News Event: Searchline Excel Performs Through Water Curtain

One of the primary advantages of the Searchline Excel is its relatively high immunity to rain and fog. A field test conducted recently by BP and DMSI at the Texas A&M Fire School provided some further evidence of just how good Excel is at ignoring water in its optical path.

The Fire School at Texas A&M University maintains a LNG test and training site that has long been equipped with Searchline Excel open path gas detectors around the perimeter to detect LNG vapors escaping from the site. The diagram (right, below) shows the site and the placement of the Excel units. The site is used for LNG response training; and the Excels used there have performed flawlessly. Recently, a major surprise was that Texas A&M and BP had installed an additional safety device prior to the April 2006 BP LNG Response School – water curtains had been set up exactly across the path of the Excel units! The pictures to the right illustrate the placement of the water curtains. You can see a low trickle of water and the Excel beam path in the right picture and the full effect of the water curtain in the left, visibly obscuring the other end of the Excel path.

What happened next was an even bigger surprise. Ray Peacoe of DMSI recounts the event: “When the water curtain was turned on, I expected to see the Excel go into a beam-blocked alarm. Even for me, someone who is familiar with the Excel’s superior ability to operate in high-obscuration environments, I was surprised to see that the Excel was not in fault. So, to verify that they were working, I put the test filter into the path and verified the appropriate response from the detector. Further verification came with the detector’s response to actual natural gas clouds even when the water curtains operated

at full pressure. Events like this are the reason that BP and other companies have recognized the consistent performance of the Excel gas detectors and recommended their use for LNG facilities around the world.”

Peacoe said, “The pictures below show the extreme obscuration caused by the water curtain and the combination of water curtain and vapor cloud. Even with these extreme levels of obscuration, the detector still responded, although a little more slowly than normal, to the presence of gas.”



Searchline Excel

What Happened at the Texas A&M Fire School



Excel penetrates water curtain



... and gas cloud.

