

### HISTORY

In Central Alberta an operator was required to fix a surface casing vent flow leak that was determined to exist at only 9 m from surface. Realizing the potential environmental impact they wanted to ensure that only the safest, most environmentally responsible products were used for the operation.

### PROPOSAL

Through Directive 20, the ERCB allows the use of up to a maximum of 1.0 m<sup>3</sup> of acid (non-descript in strength and type) to be used. As Enviro-Syn HCR is non-hazardous and several times less toxic than traditional hydrochloric acid it was proposed as a viable, effective alternative should any acid be required.

### OPERATIONS

Initial injection feed rates with non-saline water were establish in the area of 15 litres per minute at a pre-set maximum pressure rating. As this was felt to be insufficient for a successful circulation cement operation Enviro-Syn HCR was called upon in an attempt to increase the rate. 1.0 m<sup>3</sup> of blended product was delivered to location, and then pumped downhole.

### RESULTS

After treating the perforations the feed rate increased to 200 litres per minute at a pressure below the pre-set maximum. A circulation cement squeeze ensued, and successfully shut of the vent flow.

### VALUE

The operator was able to order product to location at significantly reduced product delivery logistics. Product could have been made available on-site with the cementing service provider at *No Cost* should the operator have chosen the option beforehand.

The ability to utilize a product that is environmentally friendly, non-hazardous, non-toxic and 100% biodegradable in nature was seen as an extremely valuable asset considering the proximity of the SCFV leak to surface.

