

Gas Field Condensate Tank High Level Switch Success Story

February 7, 2011

Contributed by: Jason Nickell, QEP SCADA Automation
Mike Mittanck, Brock Easley LLC

Many of the high level switch installations on gas well head condensate tanks are side mounted at the top of the tank. On these tanks, any number of discrete switch technologies can be used, for instance: the horizontal float arm, tuning fork, ultrasonic or RF switches. Mechanical switches, such as a horizontal float arm, offer an advantage because they do not require external power but they can be susceptible to fouling if the tank liquid comes in contact with the switch chamber. Electronic switch technologies require external power and share these same fouling limitations as the mechanical switches.

The most robust and reliable solution from these others, if the tank configuration will allow it, is the top tank mounted vertical displacer switch.

SOR[®], a manufacturer of high-quality pressure and level-measuring instruments for industrial service, makes several level and pressure switches that are used extensively in the oil and gas field; products that are well known in the industry for their reliability and ruggedness. QEP Field Services (*formally Questar Gas*) has used SOR switches for years in their Utah and Wyoming gas fields but recently became aware of the SOR model 702 top mounted displacer switch.

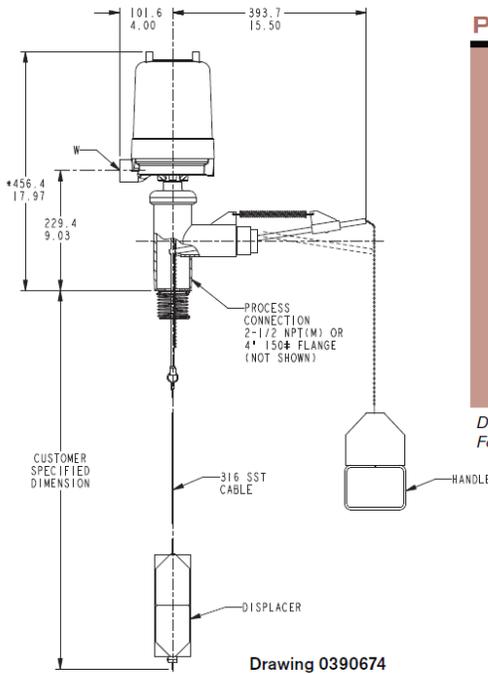
In a recent appointment by the SOR factory representative and Mike Mittanck, Brock Easley LLC., they presented the SOR model 702 switch to Jason Nickell at QEP's Red Wash Offices - south of Vernal, Utah. "The 702 switch has unique features that separate it from the competition. I thought it would be a reliable solution for QEP and I met with Jason to judge his interest," said Mittanck. Jason responded, "I liked the look of the switch, with SOR's rugged product reputation, the switch's advanced features, and the competitive pricing... I was very impressed."

An initial order for the SOR model 702 switches was placed with Brock Easley LLC and, with a prompt delivery time, the first of the switches were installed in early December 2010 on the well head condensate tanks - functioning as backup for level transmitter failure. This level transmitter redundancy for high levels is a new approach for QEP and, according to Jason; "...the installation looks good and is working well."

SOR model 702 switch – QEP, Vernal, Utah



**Model Number:
702A-F3A-B-A4-N7**



Drawing 0390674

Product Specifications

Pressure Range
TC (Tru-Check) *0 to 100 psi
MC (Manual Check) 0 psi (vented to atmosphere)

*Maximum pressure for entire level sensing assembly is 100 psi with Tru-Check installed.

Temperature Range -40 to 300°F (-40 to 150°C)

Wetted Parts

Ball	Chrome Plated Brass
Seal	Teflon
Spring	Spring Steel
Body	1018 Steel

Design and specifications are subject to change without notice. For latest revision, see www.sorinc.com.