

## CASE STUDY

# SSX-SPAN™

Systems

### CHALLENGE:

- A safe and economical way to hang a velocity or syphon string (VS) in a well where the wellhead configuration prevented it from being suspended from surface.
- Remote area that required rig less intervention.
- Deployed on live gas wells.
- VS has to be retrievable without killing the well.
- Suspend 6000ft of 2" coil tubing from near surface.

### SOLUTION:

- Utilize Owen Oil Tools X-Span technology with incorporated polished seal bore receptacle as a packer system.
- Specialty mechanical and hydraulically operated tools were used to deploy, release and if required retrieve the VS system.

### RESULTS:

- Velocity strings were successfully deployed and set in over 40 wells.

### OVERVIEW

The reservoir pressure in an established and mature gas field was decreasing to the point where fluid loading was having a major effect on production rates.

The wells would load up with water and gas production would slowly decrease until the well died and had to be purged. The cycle would repeat itself.

### SOLUTION

A decision was made to remove the existing tubing and deploy and suspend a 2" OD velocity Syphon string on coil tubing. Two inch coil tubing was used as the velocity string. A specialty designed system using X-Span technology was designed as the hanger system for the syphon string. The X-Span hanger system was deployed and set at a depth of 30 ft. as the well head design would not accommodate the hang off assembly. The SSX-Span system was designed to hold up to 70,000 pounds hanging weight.

The velocity string incorporated dual barriers, flow control seating nipples, a locator seal assembly and a slick joint with a GS type profile for deployment and retrieval. Following installation the assembly could be released with coil tubing from the 30 ft. Setting depth, water build up displaced with nitrogen and the assembly re-set and the well put back on production through the syphon string.

### RESULTS

From 6000 ft to 7000 ft per well of 2" Coil tubing was deployed and suspended on the X-Span hanger system in over 40 wells in the field. The wells immediately experienced an increase in production rates with stable and consistent flow. The operator estimated that this uniquely designed system extended the life of the field from between 12 to 15 years.

